THIN CLAYPAN RANGE SITE

1. TOPOGRAPHY

   a. This site is on nearly level glacial till plains and lake plains. Slopes are commonly less than three percent.

2. SOILS

   a. These are deep, somewhat poorly to moderately well drained soils. The surface soils are thin, medium to moderately fine textures underlain by a hardpan. The subsoils are finely textured, high in sodium and are difficult to wet. Permeability is very slow and available water capacity is low.

   b. Soil taxonomic units common to this site are:

      Exline silt loam and silty clay loam
      Miranda loam and clay loam

      Refer to Section II-A for a complete list of soil taxonomic units and range sites.

3. POTENTIAL VEGETATION

   a. Cool-season midgrasses dominate the general appearance of this site. Principal species are western wheatgrass, blue grama, and prairie junegrass. Other species are inland saltgrass, needle-and thread, Sandberg bluegrass, alkali muhly, and upland sedges. Several forb species make up about 10 percent of the total herbage production. Shrub species occur in minor amounts on this site.

   b. Continued heavy grazing by cattle results in a decrease of western wheatgrass, prairie junegrass, and needleandthread. Species that increase are blue grama, inland saltgrass, Sandberg bluegrass, and alkali muhly.

      Further deterioration of this site results in a dominance of short grasses, upland sedges, fringed sagebrush, and undesirable forbs.

   c. Approximate total annual production of this site in excellent condition is from 700 to 1100 pounds of air-dry herbage per acre, depending on growing conditions.

2--Thin Claypan Range Site

d. A detailed description of the vegetation in excellent condition is as follows:

Relative Percent Composition of the Potential Vegetation

	Mean Productivity	
	lbs/acre	% composition
Grasses		
Western wheatgrass	475	50
Blue grama	190	20
Prairie junegrass	48	5
Inland saltgrass	48	5
Needleandthread Sandberg bluegrass Alkali muhly Tumblegrass Other grasses	T*	-
Grasslikes		
Needleleaf sedge Penn sedge Other grasslikes	47	5
Forbs		
Rush skeletonplant Lemon scurfpea Scarlet globemallow Western yarrow Bladderpod Other forbs	95	10
Shrubs and half-shrubs		
Fringed sagebrush Broom snakeweed Other shrubs	47	5
Total	950	100

* T refers to trace amounts, 2½ percent weight or less

4. DOMESTIC LIVESTOCK GRAZING VALUE

a. This site has a low stocking rate potential. Plant recovery is easily destroyed by overuse and recovery is slow. The best season of use is fall for maintaining good plant cover. Cattle are more suitable for grazing than sheep due to a lack of plant diversity.

3--Thin Claypan Range Site

5. WILDLIFE NATIVE TO THE SITE

a. This site provides some forage for white-tailed deer and antelope. It is used by small mammals such as the jackrabbit, skunk, and prairie dog. Upland songbirds commonly found are the lark bunting, horned lark, chestnut-collared longspur, and goldfinch.

6. ESTHETIC AND RELATED VALUES

a. This site is a part of the upland prairies and the esthetic value of this range site is enhanced by surrounding sites that offer more plant variety. Certain species of wildlife such as the prairie dog and burrowing owl are attracted to this site for its sparse cover.

7. HYDROLOGIC CHARACTERISTICS

a. Runoff is slow to medium on good to excellent condition, properly grazed range. Water transmission rate of the soil is very slow.

8. A TYPICAL SITE LOCATION IN THIS ARE IS AS FOLLOWS